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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,556	11/29/2001	Michael A. Kopmanis	10541-542	5146

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CHICAGO, IL 60611

EXAMINER

NGUYEN, DUNG V

ART UNIT PAPER NUMBER

3723

DATE MAILED: 10/06/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/997,556

Applicant(s)

KOPMANIS, MICHAEL A.

Examiner

Dung V Nguyen

Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3-10,12-19 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-10,12-19 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 3-10, 12-19 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. The term "shaped and sized" in claims 1, 10 and 19 is a relative term which renders the claim indefinite. The term "shaped and sized" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear what shape and size the nozzle would have, the specification and drawings do not provide any shape or size for the nozzle.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-10, 12-19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwabuchi (USPN 6,454,636). Iwabuchi inherently discloses a grinding system comprising a grinding tool 8 having a grinding surface adapted to grind a part 7, a spindle 6 connected to the grinding tool 8, a first motor coupled to the spindle

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6 and adapted to rotate the spindle 6 and the grinding tool 8, such that the grinding surface spins at a predetermined velocity, a nozzle 37 adapted to supply a coolant material, an arm 21 coupled to the nozzle 37 and to the grinding tool and adapted to allow placement of the nozzle in multiple positions, each of the positions being substantially tangent to the grinding surface of the grinding tool 8, a second motor 65 connected to the arm 21 and adapted to move the nozzle 37 through each of the positions, a controller 69 coupled to the second motor and adapted to control the movement of the nozzle 37 to supply the coolant material based upon a location of the part 7 relative the grinding tool 8, a bearing collar 31 coupled around the spindle 6 of the grinding tool 8 and to the arm 21, a belt 68 coupled to the arm 21 and to a second motor 65 and adapted to translate rotation of the motor 65 into movement of the arm 21, wherein the nozzle 37 is adapted to supply the coolant material at substantially the same velocity as the grinding surface of the grinding tool 8, wherein the arm 21 is coupled to the spindle 6 of the grinding tool 8, wherein the nozzle 37 pivots and the grinding tool rotates about the same axis CL, wherein the arm 21 is adapted to allow placement of the nozzle 7 along an arcuate path, wherein the controller 69 is a computer numeric control (CNC) device, wherein the CNC device is adapted to control a location of the part 7. Iwabuchi also discloses a method of supplying coolant material for a grinding tool having a spindle 6 and a grinding surface comprising spinning the grinding surface at a predetermined velocity, providing a nozzle 37 adapted to supply a coolant material, moving the nozzle 37 through multiple positions, each of the positions being substantially tangent to the grinding surface of the grinding tool 8, wherein moving

includes moving the nozzle 37 along an arcuate path (note Fig. 1-6, col. 6, line 11 to col. 16, line 60). Iwabuchi does not disclose expressly the nozzle being shaped and sized to spray the coolant at substantially the same predetermined velocity. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to select a particular shaped and sized nozzle to spray the coolant at substantially the same velocity because Applicant has not disclosed that provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicants invention to perform equally well with other shaped and sized nozzles. Therefore, it would have been an obvious matter of design choice to modify to obtain the invention as specified in claims 1, 10 and 19.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1, 10 and 19 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kawamura is cited to show a grinding system with a coolant system.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung V Nguyen whose telephone number is 703-305-0036. The examiner can normally be reached on M-F, 6:30-3:00.

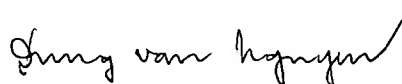
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9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J Hail can be reached on 703-308-2687. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

10. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

DVN

September 25, 2003



**DUNG VAN NGUYEN**  
**PRIMARY EXAMINER**